

BORAGINACEAE (BORAGE FAMILY)

® <i>Cryptantha cinerea</i> (<i>C. jamesii</i>)	JAMES HIDDENFLOWER
® <i>Lappula occidentalis</i>	STICKSEED
* <i>Lithospermum cobrense</i>	COPPER GROMWELL

BRASSICACEAE (CRUCIFERAE; MUSTARD FAMILY)

® <i>Arabis fendleri</i>	FENDLER ROCKCRESS
<i>Arabis perennans</i>	COMMON ROCKCRESS
<i>Descurainia obtusa</i>	DESERT TANSY-MUSTARD
<i>Dimorphocarpa wislizenii</i>	SPECTACLEPOD
<i>Erysimum capitatum</i>	WESTERN WALLFLOWER
<i>Lesquerella rectipes</i>	COLORADO BLADDERPOD
® <i>Schoenocrambe linearifolia</i> (<i>Thelypodopsis linearifolia</i>)	SLIMLEAF PLAINSMUSTARD
<i>Thlaspi montanum</i>	ALPINE PENNYCRESS

CACTACEAE (CACTUS FAMILY)

® <i>Echinocereus coccineus</i> (<i>Echinocereus triglochidiatus</i> var. <i>melanacanthus</i>)	BLACKSPINED HEDGEHOG CACTUS
<i>Escobaria vivipara</i>	ARIZONA BEEHIVE CACTUS
* <i>Mammillaria heyderi</i> var. <i>meiakantha</i>	CREAM PINCUSHION CACTUS
<i>Opuntia imbricata</i>	WALKINGSTICK CHOLLA
® <i>Opuntia polyacantha</i>	PLAINS PRICKLY PEAR

CAPPARACEAE (CAPER FAMILY)

<i>Cleome serrulata</i>	ROCKY MOUNTAIN BEEPLANT
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CARYOPHYLLACEAE (CARNATION FAMILY)

<i>Arenaria lanuginosa</i>	SPREADING SANDWORT
<i>Silene laciniata</i>	MEXICAN CAMPION or CATCHFLY

CHENOPODIACEAE (GOOSEFOOT FAMILY)

<i>Chenopodium graveolens</i>	RAGLEAF GOOSEFOOT
<i>Chenopodium leptophyllum</i>	NARROWLEAF GOOSEFOOT
@ <i>Kochia scoparia</i>	FIREWEED, SUMMER CYPRESS
<i>Krascheninnikovia lanata</i> (<i>Ceratoides lanata</i> ; <i>Eurotia lanata</i>)	WINTERFAT
@ <i>Salsola tragus</i> (<i>S. kali</i>)	RUSSIAN THISTLE

COMMELINACEAE (DAYFLOWER FAMILY)

<i>Commelina dianthifolia</i>	BIRDBILL DAYFLOWER
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<i>Commelina erecta</i>	NARROWLEAF DAYFLOWER
<i>Tradescantia occidentalis</i>	PRAIRIE SPIDERWORT

CONVOLVULACEAE (MORNINGGLORY FAMILY)

@ <i>Convolvulus arvensis</i>	FIELD BINDWEED
* <i>Ipomoea plummerae</i>	HUACHUCA MOUNTAIN MORNINGGLORY

EUPHORBIACEAE (SPURGE FAMILY)

<i>Chamaesyce fendleri</i>	FENDLER SPURGE
<i>Euphorbia lurida</i>	SHORTHORNED SPURGE
<i>Tragia ramosa</i>	CATNIP NOSEBURN

FABACEAE (LEGUMINOSAE; PEA FAMILY)

* <i>Astragalus egglestonii</i>	EGGLESTON MILK VETCH
© <i>Astragalus mollissimus</i> var. <i>matthewsii</i>	MOGOLLON WOOLLY MILK VETCH
* <i>Dalea exigua</i>	CHIHUAHUAN PRAIRIECLOVER
® <i>Lotus wrightii</i>	WRIGHT DEERVETCH
® <i>Lupinus kingii</i>	KING LUPINE
@ <i>Medicago lupulina</i>	BLACK MEDICK
@ <i>Melilotus albus</i>	WHITE SWEETCLOVER
@ <i>Melilotus officinalis</i>	YELLOW SWEETCLOVER
* <i>Peteria scoparia</i>	CAMOTE DEL MONTE
<i>Vicia americana</i> ssp. <i>minor</i>	AMERICAN VETCH

GENTIANACEAE (GENTIAN FAMILY)

* <i>Frasera speciosa</i>	ELK WEED
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GERANIACEAE (GERANIUM FAMILY)

<i>Geranium caespitosum</i>	TUFTED GERANIUM
* ® <i>Geranium lentum</i>	MOGOLLON GERANIUM

HYDROPHYLLACEAE (WATERLEAF FAMILY)

© <i>Phacelia serrata</i>	CINDERS PHACELIA
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IRIDACEAE (IRIS FAMILY)

<i>Iris missouriensis</i>	ROCKY MOUNTAIN IRIS
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LAMIACEAE (LABIATAE; MINT FAMILY)

<i>Agastache pallidiflora</i>	NEW MEXICO GIANT HYSSOP
@ <i>Marrubium vulgare</i>	HOREHOUND

LILIACEAE (LILY FAMILY)

® <i>Allium cernuum</i> Roth	NODDING ONION
* <i>Echeandia flavescens</i> (<i>Anthericum torreyi</i>)	TORREY CRAGLILY

LINACEAE (FLAX FAMILY)

<i>Linum aristatum</i>	BRISTLE or AWNED FLAX
<i>Linum lewisii</i>	PRAIRIE FLAX
<i>Linum neomexicanum</i>	NEW MEXICO YELLOW FLAX

LOASACEAE (LOASA FAMILY)

<i>Mentzelia</i> sps. (3 species)	BLAZINGSTAR
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MALVACEAE (MALLOW FAMILY)

® <i>Sphaeralcea digitata</i>	JUNIPER GLOBEMALLOW
<i>Sphaeralcea fendleri</i>	FENDLER GLOBEMALLOW

MOLLUGINACEAE (CARPETWEED FAMILY)

<i>Mollugo cerviana</i>	THREADSTEM CARPETWEED
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MONOTROPACEAE (INDIAN PIPE FAMILY)

* <i>Pterospora andromedea</i>	WOODLAND PINEDROPS
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NYCTAGINACEAE (FOUR O'CLOCK FAMILY)

<i>Abronia fragrans</i>	SNOWBALL SAND VERBENA
® <i>Mirabilis multiflora</i>	COLORADO FOUR O'CLOCK

ONAGRACEAE (EVENING-PRIMROSE FAMILY)

® <i>Gaura coccinea</i>	SCARLET BEEBLOSSOM
<i>Oenothera albicaulis</i>	WHITESTEM EVENING-PRIMROSE
<i>Oenothera caespitosa</i> ssp. <i>marginata</i>	TUFTED EVENING-PRIMROSE

OROBANCHACEAE (BROOMRAPE FAMILY)

<i>Orobanche ludoviciana</i> ssp. <i>multiflora</i>	MANYFLOWERED BROOMRAPE
* <i>Orobanche fasciculata</i>	CLUSTERED BROOMRAPE

PLANTAGINACEAE (PLANTAIN FAMILY)

<i>Plantago argyrea</i>	SILVERY PLANTAIN
® <i>Plantago patagonica</i>	WOOLLY PLANTAIN

POLEMONIACEAE (PHLOX FAMILY)

<i>Ipomopsis aggregata</i> ssp. <i>formosissima</i>	SCARLET SKYROCKET
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POLYGALACEAE (MILKWORT FAMILY)

* <i>Monnina wrightii</i>	BLUE PYGMYFLOWER
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POLYGONACEAE (KNOTWEED FAMILY)

<i>Eriogonum alatum</i>	WINGED WILD BUCKWHEAT
® <i>Eriogonum jamesii</i>	JAMES WILD BUCKWHEAT

@ <i>Rumex crispus</i>	CURLY DOCK
PORTULACACEAE (PURSLANE FAMILY)	
@ <i>Portulaca oleracea</i>	COMMON PURSLANE
® <i>Talinum confertiflorum</i>	NEW MEXICO FAMEFLOWER
* <i>Talinum pulchellum</i>	SHOWY FAMEFLOWER

PRIMULACEAE (PRIMROSE FAMILY)

<i>Androsace septentrionalis</i> ssp. <i>glandulosa</i>	NORTHERN ROCK JASMINE
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RANUNCULACEAE (CROWFOOT FAMILY)

<i>Thalictrum fendleri</i>	FENDLER MEADOWRUE
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ROSACEAE (ROSE FAMILY)

<i>Potentilla pensylvanica</i>	PENNSYLVANIA CINQUEFOIL
* <i>Potentilla subviscosa</i>	NAVAJO CINQUEFOIL

RUBIACEAE (MADDER FAMILY)

<i>Houstonia wrightii</i>	PYGMY BLUET
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SANTALACEAE (SANDALWOOD FAMILY)

<i>Comandra umbellata</i>	PALE BASTARD TOADFLAX
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SCROPHULARIACEAE (FIGWORT FAMILY)

® <i>Castilleja integra</i>	WHOLELEAF INDIAN PAINTBRUSH
® <i>Orthocarpus purpureoalbus</i>	PURPLEWHITE OWLCLOVER
<i>Penstemon barbatus</i>	SCARLET PENSTEMON
@ ® <i>Verbascum thapsus</i>	WOOLLY MULLEIN

SOLANACEAE (POTATO FAMILY)

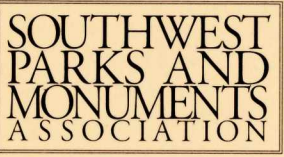
<i>Solanum jamesii</i>	WILD POTATO
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VERBENACEAE (VERVAIN FAMILY)

® <i>Glandularia wrightii</i>	WRIGHT VERVAIN
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VISCACEAE (MISTLETOE FAMILY)

<i>Phoradendron juniperinum</i>	JUNIPER MISTLETOE
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A CHECKLIST OF PLANTS

OF
EL MALPAIS NATIONAL MONUMENT

COMPILED BY DAVID L. BLEAKLY



N E W M E X I C O

PUBLISHED BY SOUTHWEST PARKS AND MONUMENTS ASSOCIATION
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VEGETATION & FLORA

Despite the terrain in the El Malpais being dominated by lava, the vegetation is often well-developed. A surprising number and variety of plants are found in the monument. There are four vegetation types:

- ♦ The newest lava flow (McCartys) and aa lava have the least vegetation and are sometimes almost barren.
- ♦ Grassland or grass/shrub vegetation occurs on the nearly level alluvial fringes of the flows and on the oldest lava flows mostly south and west of El Malpais. Common plants: blue grama, threeawns, Apache plume, rabbitbrush-es, snakeweed, and sages (*Artemisia* *sps.*)
- ♦ Shrub/conifer vegetation is located mostly on sedimentary substrates, on and near cinder cones, and occasionally elsewhere. Common plants: Colorado piñon, oneseed juniper, Apache plume, New Mexico olive, wax currant; dropseeds, needlegrasses, and spectaclepod in sandy areas.
- ♦ Mixed conifer woodland, dominated by Ponderosa Pine but also including Rocky Mountain juniper and Douglas fir, is found in the higher elevations on west side of the monument. Other plants: alligator juniper, mountain muhly, junegrass and pine dropseed.

The determination of the plant diversity for the monument is an ongoing and open-ended task. At this time there are about 445 taxa, including species, sub-species, and varieties.

El Malpais is located in the Colorado Plateau Physiographic Province in the Southern Rocky Mountain-Mogollon Floristic Area (McLaughlin 1989). The region’s floristic composition has been influenced by the surrounding floristic areas: the Colorado Plateau (to the north), the Apachean (to the south), the Chihuahuan (to the southeast), and the Great Plains (to the west).

For more information about the plant life in El Malpais see Bleakly (1997).

ARRANGEMENT

This list is condensed from Bleakly (1997) and includes common, conspicu-ous, interesting, introduced, or rare plants. Species are grouped as follows: Ferns & Spikemoss, Trees & Shrubs, Grasses & Grasslike Plants, and Forbs & Wildflowers. The latter is the largest group and includes the yuccas, lilies, and many other species. Symbols before the plant name:

- ® = common or abundant and widespread throughout most of monument
- @ = introduced (alien) plant, usually weedy
- * = interesting or unusual occurrence (plants that are near the edge of their range, seldom encountered, or occurring at a lower elevation than usual)
- © = rare or endemic (rare means globally rare; endemic means growing only in a limited area; either type often grows on an unusual substrate)

Some synonyms are in parentheses.

Most plant names used in this folder are from the Natural Resources Conservation Service (US Dept. of Agriculture 1998), but the mustards (Brassicaceae) are from Rollins (1993), the grasses (Poaceae) are from Allred (1993), and the ferns are from the Flora of North America (1993).

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FERNS & SPIKEMOSS	
ASPLENIACEAE (SPLEENWORT FAMILY)	
* <i>Asplenium septentrionale</i>	GRASS FERN
DRYOPTERIDACEAE (WOOD FERN FAMILY)	
* <i>Dryopteris filix-mas</i>	MALE FERN
® <i>Woodsia plummerae</i>	PLUMMER CLIFF FERN
PTERIDACEAE (MAIDENHAIR FERN FAMILY)	
<i>Cheilanthes feei</i>	SLENDER LIPFERN
SELAGINELLACEAE (SPIKEMOSS FAMILY)	
* <i>Selaginella densa</i>	ROCKY MOUNTAIN SPIKEMOSS
TREES & SHRUBS	
CUPRESSACEAE (CYPRESS FAMILY)	
<i>Juniperus deppeana</i>	ALLIGATOR JUNIPER
® <i>Juniperus monosperma</i>	ONESEED JUNIPER
® <i>Juniperus scopulorum</i>	ROCKY MOUNTAIN JUNIPER

PINACEAE (PINE FAMILY)	
® <i>Pinus edulis</i>	COLORADO PINYON
® <i>Pinus ponderosa</i>	PONDEROSA PINE
<i>Pseudotsuga menziesii</i>	INLAND DOUGLAS FIR
AGAVACEAE (AGAVE FAMILY)	
® <i>Yucca baccata</i>	BANANA YUCCA, DATIL
<i>Yucca glauc</i>	NARROWLEAF YUCCA
ANACARDIACEAE (SUMAC FAMILY)	
® <i>Rhus trilobata</i>	SKUNKBUSH
ASTERACEAE (COMPOSITAE; SUNFLOWER FAMILY)	
® <i>Tetradymia canescens</i>	GREY HORSEBRUSH
BERBERIDACEAE (BARBERRY FAMILY)	
<i>Mahonia repens</i>	CREEPING MAHONIA
CHENOPODIACEAE (GOOSEFOOT FAMILY)	
<i>Atriplex canescens</i>	FOURWING SALTBUSH
FAGACEAE (BEECH FAMILY)	
<i>Quercus gambelii</i>	GAMBEL OAK
<i>Quercus pauciloba</i>	WAVYLEAF OAK
<i>(Q. undulata)</i>	
GROSSULARIACEAE (GOOSEBERRY FAMILY)	
® <i>Ribes cereum</i>	WAX CURRANT
OLEACEAE (OLIVE FAMILY)	
® <i>Forestiera pubescens</i>	NEW MEXICO OLIVE
<i>Fraxinus cuspidata</i>	FRAGRANT ASH
RANUNCULACEAE (CROWFOOT FAMILY)	
<i>Clematis ligusticifolia</i>	WESTERN VIRGIN'S BOWER
ROSACEAE (ROSE FAMILY)	
® <i>Fallugia paradoxa</i>	APACHE PLUME
® <i>Holodiscus dumosus</i>	MOUNTAIN SPRAY
<i>Rubus idaeus ssp. strigosus</i>	RED RASPBERRY
SALICACEAE (WILLOW FAMILY)	
<i>Populus tremuloides</i>	QUAKING ASPEN
VITACEAE (GRAPE FAMILY)	
<i>Vitis arizonica</i>	ARIZONA GRAPE
GRASSES & GRASSLIKE PLANTS	
CYPERACEAE (SEDGE FAMILY)	
<i>Carex occidentalis</i>	WESTERN SEDGE

<i>Carex vallicola</i>	VALLEY SEDGE
® <i>Cyperus fendlerianus</i>	FENDLER FLATSEDGE
* <i>Cyperus squarrosus</i>	BEARDED FLATSEDGE
POACEAE (GRAMINAE; GRASS FAMILY)	
<i>Andropogon gerardii</i>	BIG BLUESTEM
<i>Aristida arizonica</i>	ARIZONA THREEAWN
<i>Aristida purpurea</i>	FENDLER THREEAWN
<i>Blepharoneuron tricholepis</i>	PINE DROPSEED
<i>Bouteloua curtipendula</i>	SIDEOATS GRAMA
® <i>Bouteloua gracilis</i>	BLUE GRAMA
@ <i>Bromus tectorum</i>	CHEATGRASS
® <i>Elymus longifolius</i>	BOTTLEBRUSH SQUIRRELTAIL
<i>(Sitanion hystrix)</i>	
<i>Koeleria macrantha</i>	JUNEGRASS
<i>Lycurus setosus</i>	WOLFTAIL
<i>Muhlenbergia minutissima</i>	LEAST MUHLY
® <i>Muhlenbergia montana</i>	MOUNTAIN MUHLY
<i>Muhlenbergia torreyi</i>	RING MUHLY
<i>Oryzopsis micrantha</i>	LITTLESEED RICEGRASS
<i>Poa fendleriana</i>	MUTTONGRASS
<i>Schedonnardus paniculatus</i>	TUMBLEGRASS
<i>Schizachyrium scoparium</i>	LITTLE BLUESTEM
<i>Stipa comata</i>	NEEDLE-AND-THREAD
FORBS & WILDFLOWERS	
AMARANTHACEAE (AMARANTHUS FAMILY)	
@ <i>Amaranthus</i> <i>sps.</i> (3 species)	PIGWEEED
APIACEAE (UMBELLIFERAE; PARSLEY FAMILY)	
<i>Pseudocymopterus montanus</i>	MOUNTAIN PARSLEY
ASCLEPIADACEAE (MILKWEED FAMILY)	
<i>Asclepias asperula</i>	SPIDER MILKWEED
ASTERACEAE (COMPOSITAE; SUNFLOWER FAMILY)	
@ <i>Acroptilon repens</i>	RUSSIAN KNAPWEED
<i>(Centaurea repens)</i>	
<i>Ageratina herbacea</i>	WHITE THOROUGHWORT
<i>(Eupatorium herbaceum)</i>	
<i>Antennaria parvifolia</i>	PUSSYTOES

<i>Artemisia campestris</i>	WESTERN SAGEWORT
® <i>Artemisia carruthii</i>	CARRUTH WORMWOOD
<i>Artemisia dracunculus</i>	WILD TARRAGON
<i>Artemisia frigida</i>	FRINGED SAGEBRUSH
® <i>Bahia dissecta</i>	CUTLEAF
<i>Brickellia brachyphylla</i>	PLUME BRICKELLBUSH
@ <i>Carduus nutans</i>	MUSK THISTLE
® <i>Chaetopappa ericoides</i>	WHITE ASTER
<i>(Leucelene ericoides)</i>	
<i>Cirsium neomexicanum</i>	NEW MEXICO THISTLE
@ <i>Cirsium vulgare</i>	BULL THISTLE
® <i>Ericameria nauseosa</i>	RUBBER RABBITBRUSH
<i>(Chrysothamnus nauseosus)</i>	
<i>Erigeron colomexicanus</i>	RUNNING FLEABANE
<i>Erigeron divergens</i>	SPREADING FLEABANE
® <i>Erigeron flagellaris</i>	TRAILING FLEABANE
<i>Gaillardia pinnatifida</i>	HOPI BLANKET-FLOWER
<i>Grindelia nuda</i> <i>var. aphanactis</i>	MOUNTAIN GUMWEED
<i>Gutierrezia sarothrae</i>	BROOM SNAKEWEED
<i>Heliomeris multiflora</i>	SHOWY GOLDENEYE
<i>var. nevadensis (Viguiera multiflora)</i>	
® <i>Heterotheca villosa</i>	HAIRY GOLDEN-ASTER
<i>Hymenopappus filifolius</i>	WOOLLYWHITE
® <i>Hymenoxys richardsonii</i>	PINGUE, COLORADO RUBBERWEED
@ <i>Lactuca serriola</i>	PRICKLY LETTUCE
® <i>Pericome caudata</i>	TAPERLEAF
® <i>Senecio multilobatus</i>	UINTA GROUNDSEL
@ <i>Sonchus asper</i>	SPINY SOW THISTLE
<i>Stephanomeria pauciflora</i>	FEWFLOWER WIRELETTUCE
@ <i>Taraxacum officinale</i>	COMMON DANDELION
<i>Tetrameuris argentea</i>	BITTERWEED
<i>(Hymenoxys argentea)</i>	
<i>Thelesperma megapotamicum</i>	HOPI TEA
<i>Townsendia exscapa</i>	EASTER DAISY
@ <i>Tragopogon dubius</i>	WESTERN SALSIFY